was named as the Response Coordinator. Representatives from other Federal agencies and the State of Texas were named to serve on the response team. A vulnerability study was conducted by Research Planning Institute (RPI) of Columbia, South Carolina to identify and map sensitive areas of the entire Texas coastline. In mid July, the U.S.C.G. cutter Valiant sailed with NOAA and EPA scientists aboard to obtain samples of the oil and also to chart the water currents in the Gulf. NOAA gathered data from the Coast Guard overflights in order to monitor the movement of the oil.

On August 24, 1979, Captain Roger L. Madson, U.S.C.G., testified before the Committee on Environmental Affairs. Captain Madson explained the National Contingency Plan and the role that the National Response Team and the Regional Response Team play in dealing with major oil spills. The Coast Guard, according to Captain Madson, decided that its first line of defense would be "to stop the oil from entering these bays and estuaries, and this would mean booming of the passes, starting at Brazos-Santiago, moving up to Port Mansfield, the Fish Pass below Aransas, and then Aransas Pass, itself."

When the oil was 60 miles below the Rio Grande, all organizations and equipment involved in the operation, were called in. The Navy Mark-O-Skimmer worked effectively on the mousse.

The strategy used by the Coast Guard, according to Capt. Madson's testimony, was to give highest priority to cleaning the beaches near the hotels and motels to minimize the economic impact as much as possible. Isolated areas of beaches were not cleaned at that time, stated Madson, because it was not economically feasible to clean 130 miles of beaches daily.

STATE ACTIVITIES

During the 70 days from the blow out (June 3, 1979) until oil began to appear in Texas waters and on the beaches, several meetings were held to coordinate the spill response effort of state and federal agencies.

On July 13, 1979, a meeting of the Regional Response Team (RRT) was held at the Eighth Coast Guard District Headquarters in New Orleans. Dick Whittington, Deputy Director of the Texas Department of

Water Resources (TDWR) named by the Governor to be the state's representative to the RRT, outlined the state's strategy for bay and estuary protection and beach cleanup. The priorities of the plan were:

- To prevent oil from entering bays, estuaries, and the the Laguna Madre by fill in or deploying booms across passes
- 2 To clean recreational beaches
- 3 To clean remote beaches.

On July 20, a meeting of all state agencies interested or involved in the spill response activities was held to obtain comments on the TDWR pass protection plans and beach cleanup strategy.

On July 27, the TDWR presented at the RRT meeting a strategy, which had been coordinated with other Texas state agencies, for protecting the bays up to the Colorado River. This strategy was later refined by the USCG strike teams and placed into effect.

On July 31, the TDWR staff personnel were permanently assigned to the USCG command post in Corpus Christi to represent the state. State-On-Scene Coordinator was John Latchford.

The following is a brief description of the roles of the other state agencies involved:

The Division of Disaster Emergency Services (DES) of the Texas Department of Public Safety (DPS) had the responsibility of continuous evaluation of the effects of the oil spill. Reports received from the Coast Guard and from DES contacts with authorities concerned with the slicks potential impact on the Texas coast were reviewed and reports were transmitted by message, telephone and personal contacts to the Governor's office.

The General Land Office (GLO) monitored the coastline from Aransas County to Cameron County to assess the social, economic and environmental impacts of the oil spill on state lands. The GLO also designated potential holding sites as they were needed and coordinated information gathering with TDWR.

The Texas Department of Health (TDH) collected samples of marine food organisms from all of Texas major bay systems for hydrocarbon testing before the oil arrived to provide a data base for determining

the effect on the wholesomeness of Texas seafoods in the event that the oil invaded the bays and estuaries. The Department's Division of Food and Drugs conducted tests to determine if any seafood had been contaminated by the oil spill. No contamination was reported. 10

The Texas Railroad Commission deployed remote weather stations and arranged for storage and salvage of recovered oil. $^9\,$

The Texas Department of Highways and Public Transportation prepared disposal sites, closed passes, participated in cleanup of the beaches, transferred oil debris to its final disposal site, and constructed access roads where needed. 9

The primary role of the Texas Parks and Wildlife Dept. was to monitor the fish and wildlife populations. The Department chemists also aided in bioassays and decisions on oil containment and cleanup. 11

The Texas Air Control Board conducted burning tests as an alternative to oil removal technique. $^9\,$

The Attorney General's office provided assistance in legal questions arising from the oil spill and the cleanup operations. 9

RESEARCH

Texas beaches, bays and estuaries are irreplaceable assets of great value to the Texas coastal economy. In order to protect this valuable asset for the future, basic research is needed now to assess the oil spill of last summer.

Key processes 12 of the coastal ecosytem which must be understood include:

- A. Productivity
 - carbon uptake
 - nitrogen uptake
 - fresh water input
 - input from swamps and marshes
- B. Geochemical cycles
 - metals
 - pollutants
 - organics from rivers
- C. Food web analyses
 - benthic role
 - seagrass role